

**REMARKS**

Claims 1-9 and 18-28 are pending in the application.

Claims 1-9 and 18-28 stand rejected.

Claims 1, 3, 4, 18, 20, 21, and 23 have been amended.

Claims 2, 19, and 24 have been cancelled.

**Rejection of Claims under 35 U.S.C. §103**

Claims 1-9 and 18-28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over by Gabber, et al., U.S. Patent Publication No. 2003/0145179 A1 (“Gabber”), in view of Duprey et al., U.S. Patent No. 6,671,705 (“Duprey”). After careful consideration of the remarks in the present Office Action, Applicants respectfully assert that Claims 1-9 and 18-28, as now amended, are not rendered unpatentable by the combination of Gabber and Duprey, in view of the arguments herein.

While not conceding that the cited references qualify as prior art, but instead to expedite prosecution, Applicants have chosen to respectfully disagree and traverse the rejections as follow. Applicants reserve the right, for example, in a continuing application, to establish that the cited references, or other references cited now or thereafter, do not qualify as prior art as to an invention embodiment previously, currently, or subsequently claimed.

Independent Claim 1, as amended is representative of amended independent Claims 18 and 23, and now recites:

1. A method comprising:  
identifying a plurality of secondary nodes, wherein  
    the identifying comprises sending an update from a primary node to the plurality of secondary nodes, and  
    at least one secondary node of the plurality of secondary nodes inserts the update in a respective log of updates, and each of the respective log of updates corresponds to a respective copy of the data;  
determining that all of the plurality of secondary nodes have acknowledged the update;  
and  
causing each secondary node of the at least one secondary node to clear the update from the respective log of updates by sending a notification to each of the plurality of secondary nodes once all of the plurality of secondary nodes have acknowledged the update, wherein  
    said clearing is performed in response to receiving the notification.

It will be appreciated that certain of the amendments presented herein are editorial in nature, and merely reflect changes in wording and the like, rather than any changes in substance. Amended independent Claims 18 and 23 reflect comparable limitations, among other limitations.

Applicants respectfully submit that Gabber and Duprey, taken alone or in any permissible combination, fail to teach, among other limitations, the limitations of Claim 1 that describe causing each secondary node of the at least one secondary node to clear the update from the respective log of updates by sending a notification to each of the plurality of secondary nodes once all of the plurality of secondary nodes have acknowledged the update, wherein the clearing is performed in response to receiving the notification.

The Office Action asserts (and Applicants agree) that Gabber fails to teach using a log to maintain updates. *See* Office Action p. 4. Applicants further submit that Duprey also fails to

teach the amended limitations of Claim 1 describing a respective log of updates, and so fails to cure the infirmities of Gabber.

Moreover, it will be noted that the amended limitations of Claim 1 have incorporated parts of previously presented Claim 2. The Office Action (in rejecting previous Claim 2) equates Duprey's logic being free to remove write entries from a write intent log with the claimed causing each secondary node to clear the update from the respective log of updates. *See* Office Action p. 5. However, Applicants respectfully submit that the cited sections of Duprey do not teach or suggest causing each secondary node of the at least one secondary node to clear the update from the respective log of updates. Instead, Duprey teaches remote mirroring logic that performs periodic tests to determine if a write entry is still needed and removes write entries from the write intent log if it is determined that a write entry is unneeded. *See* Duprey, 16:23-26. But nothing in Duprey teaches each secondary node clearing the update from their respective log of updates, as is recited in the independent claims. Thus, Duprey teaches the use of a structurally different component (the remote mirroring logic) to perform the clearing of a log and fails to describe each of the secondary nodes performing the clearing of updates from the respective log of updates. Hence, Duprey fails to teach all the limitations of Claim 1.

Furthermore, even if it were assumed that Duprey's remote mirroring logic can be equated with each secondary node (a point Applicants do not concede), Duprey still fails to teach that such clearing of a respective log of updates is performed in response to receiving the notification that all of the plurality of secondary nodes have acknowledged the update, as required by Claim 1. Instead, Duprey teaches that a write request is cleared from a write log after a periodic test has been performed and the remote mirroring logic determines whether the write request is still needed. *Id.* Duprey goes on to teach that a write entry is considered to be

needed if the remote mirroring logic is still in the process of updating one or more of the images and is considered to be unneeded if the remote mirroring logic has updated all mirror images based upon the corresponding write request. *Id.* at 16:26-32. However, nothing in Duprey teaches that such clearing of the write log is performed in response to a notification that each of the secondary nodes have acknowledged the update. Thus, Duprey fails to teach causing each secondary node of the at least one secondary node to clear the update from the respective log of updates by sending a notification to each of the plurality of secondary nodes once all of the plurality of secondary nodes have acknowledged the update, wherein said clearing is performed in response to receiving the notification.

Moreover, Applicants respectfully submit that one of skill in the art would not expect the combination of Gabber and Duprey to disclose (or render obvious) the elements recited in Claim 1. As described above, Duprey teaches a remote mirroring system device that clears a write log when it is determined that write entries in a write log are no longer necessary. *See* Duprey, 16:19-32. Given that Duprey already describes a structure (remote mirroring system) and method to clear a write log, there is no teaching, motivation, or suggestion to combine Duprey and Gabber in any way that would allow one of ordinary skill in the art to practice the limitations of Claim 1, particularly those that describe a secondary node clearing the update from its respective log of updates. Thus, there is no teaching, motivation, or suggestion to combine Duprey and Gabber to teach all the limitations of Claim 1.

Hence, the combination of Gabber and Duprey fails to disclose (or render obvious) each and every element of independent Claims 1, 18, and 23, and all Claims depending therefrom. Thus, Claims 1-9 and 18-28 are not rendered unpatentable by the combination of Gabber and

Duprey. For at least these reasons, Applicants respectfully request that the rejections to all claims be withdrawn.

**CONCLUSION**

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned at 512-439-5094.

If any extensions of time under 37 C.F.R. § 1.136(a) are required in order for this submission to be considered timely, Applicant hereby petitions for such extensions. Applicant also hereby authorizes that any fees due for such extensions or any other fee associated with this submission, as specified in 37 C.F.R. § 1.16 or § 1.17, be charged to deposit account 502306.

Respectfully submitted,

*Ana G. Luther*

Ana G. Luther  
Patent Agent for Applicants  
Reg. No. 61,704  
Telephone: (512) 439-5094  
Facsimile: (512) 439-5099